Amendment to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

List of Claims:

Claims 1 – 5 (Canceled).

Claim 6 (Original): An optical spectrum analyzer wherein the light under measurement is spectrally divided by transmitting the components thereof at different, wavelength-by-wavelength angles using a chromatic dispersion device, said light under measurement thus spectrally divided by said chromatic dispersion device is received by an optical detector, and a wavelength calculation means determines the wavelengths of said light under measurement by means of an output from said optical detector, wherein said optical spectrum analyzer comprises a calibration unit for correcting wavelengths determined by said wavelength calculation means according to the refractive index of the medium in which said chromatic dispersion device is placed.

Claim 7 (Original): The optical spectrum analyzer of claim 6, wherein said calibration unit comprises:

calibration data memory means for storing correcting values for wavelengths at a desired refractive index; and

wavelength calibration means for reading said correction values from said calibration data memory means to correct wavelengths determined by said wavelength calculation means.

Claim 8 (Original): The optical spectrum analyzer of claim 6, wherein said calibration unit comprises:

calibration data memory means for storing correcting values for wavelengths;

calibration data calculation means for determining correction values from the refractive index of the medium in which said chromatic dispersion device is placed and storing said correction values in said calibration data memory means; and

wavelength calibration means for reading said correction values from said calibration data memory means to correct wavelengths determined by said wavelength calculation means.

Claim 9 (Original): The optical spectrum analyzer of claim 8, further comprising refractive index calculation means for determining the refractive index of the medium in which said chromatic dispersion device is placed from the environment of use, and outputting said refractive index thus determined to said calibration unit.

Claim 10 (Original): The optical spectrum analyzer of claim 9, further comprising environment measurement means for measuring the environment of use, and outputting the results of measurement to said refractive index calculation means.

Claim 11 (Previously Presented): The optical spectrum analyzer of claim 9, wherein said the environment of use includes at least one factor of an air composition, an altitude above ground, sea level, atmospheric pressure, temperature, relative humidity, or steam pressure.

Claim 12 (Original): The optical spectrum analyzer of claim 10, wherein said environment measurement means is an altimeter.

Claim 13 (Original): The optical spectrum analyzer of claim 10, wherein said environment measurement means is a GPS.

Claim 14 (Original): The optical spectrum analyzer of claim 6, 7, 8, 9, 10, 11, 12 or 13, wherein said chromatic dispersion device is a diffraction grating or a prism.